Value Analysis Program

FY02 Annual Report

October 2002

Prepared by
Caltrans VA Branch

FHWA Annual Report

FHWA VALUE ENGINEERING STUDY SUMMARY REPORT

Division/State: California **Fiscal Year: 2002**

1. Number of VE studies completed this year.

In-house	Consultant	Total
2	35	37

2. Cost of performing the VE studies completed this year.

In-house	Consultant	Administrative	Total
$635,710	$1,386,993	$525,259	$2,553,962

3. Estimated construction costs of projects studied.

In-house	Consultant	Total
$37,300,0000	$2,815,880,500	$2, 853,180,500

4. Number & Value of ***All Proposed*** VE Recommendations this year.

	In-House Led	Consultant Led	Total
Cost Savings	$1,175,000	$373,134,585	$374,309,585
Cost Increases	$400,0000	$50,882,600	$51,282,600
No. Recommendations	2	288	290
Average Scope Performance Improvement	N/A	15%	15%
Average Value Improvement (Scope Improvement/ Project Costs)	N/A	91%	91%

5. Number & Value of ***Approved & Conditionally Approved*** VE recommendations (including carryover projects from other years).

Approved

	In-House Led	Consultant Led	Total
Initial Cost Savings	$625,000	$167,417,360	$168,042,360
Initial Cost Increases	0	$11,741,000	$11,741,000
No. Recommendations	1	74	75
Average Scope Performance Improvement	N/A	12%	12%
Average Value Improvement (Scope Improvement/ Project Costs)	N/A	68%	68%
Acceptance Rate (No. Alt. Accepted/ Proposed) w/ CA	50%	26%	26%

Conditionally Approved

Figures that may be added to **Accepted Alternatives (awaiting final approval)**

	In-House Led	Consultant Led	Total
Initial Cost Savings	0	$4,767,000	$4,767,000
Initial Cost Increases	0	$2,409,000	$2,409,000
No. Recommendations	0	22	22
Average Scope Performance Improvement (addition to Accepted)	N/A	0%	0%
Average Value Improvement (Scope Improvement/ Project Costs)	N/A	0%	0%
Acceptance Rate (Additive to Accepted Rate)	0%	0%	0%

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6. Life-cycle cost (cost avoidance) savings from VE studies.

Proposed Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$225,000	$322,251,000	$322,476,000
Subsequent Costs(Savings – Increases)	$0	$18,566,000	$18,566,000
Highway User (Savings – Increases)	$0	$33,676,000	$33,676,000
Total (Net Present Value) LCC Savings (Savings- Increases)	$225,000	$374,493,985	$374,718,985

* See Item 4 (Sum of Positive and Negative Initial Cost Savings)

Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$625,000	$155,676,360	$156,301,360
Subsequent Costs(Savings – Increases)	$0	$7,519,000	$7,519,000
Highway User (Savings – Increases)	$0	$40,408,000	$40,408,000
Total (NPV) LCC Savings (Savings- Increases)	$625,000	$203,603,360	$204,228,360

* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

Conditionally Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *)	$0	$2,358,000	$2,358,000
Subsequent Costs(Savings – Increases)	$0	$0	$0
Highway User (Savings – Increases)	$0	$0	$0
Total (NPV) LCC Savings (Savings- Increases	$0	$2,358,000	$2,358,000

* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

7. Total VE-related training costs (include an estimate of salaries of persons attending, travel cost and local incidental costs $108,000.

8. Number of employees trained in VE during fiscal year.

a. FHWA 0

b. State and Others 27

9. Number of construction **VECP's** submitted 30

10. Number of construction **VECP's** approved 29.

11. Savings from approved construction VECPs.

In-house Value	$0
Contractor Value	$2,496,282.42
Total	$2,496,282.42

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FHWA VALUE ENGINEERING STUDY SUMMARY REPORT

Carryover Projects

12. Number of VE studies started before the end of FY 2002 and are in the process of being completed.

In-house	Consultant	Total
0	31	31

13. Cost of performing the VE studies completed this year.

In-house	Consultant	Administrative	Total
TBD	TBD	TBD	TBD

14. Estimated construction costs of projects studied.

In-house	Consultant	Total
$0	$3,638,210,000	$3,638,210,000

15. Number & Value of ***All Proposed*** VE Recommendations this year.

	In-House Led	Consultant Led	Total
Cost Savings	$0	$377,104,000	$377,104,000
Cost Increases	0	$72,867,500	$72,867,500
No. Recommendations	0	184	184
Average Scope Performance Improvement	0	29%	29%
Average Value Improvement (Scope Improvement/ Project Costs)	0	37%	37%

16. Number & Value of ***Approved & Conditionally Approved*** VE recommendations (including carryover projects from other years).

Approved

	In-House Led	Consultant Led	Total
Initial Cost Savings	0	$55,418,000	$55,418,000
Initial Cost Increases	0	$992,000	$992,000
No. Recommendations	0	16	16
Average Scope Performance Improvement	0	58	58
Average Value Improvement (Scope Improvement/ Project Costs)	0	56	56
Acceptance Rate (No. Alt. Accepted/ Proposed) w/ CA	0	9%	9%

Conditionally Approved

Figures that may be added to **Accepted Alternatives (awaiting final approval)**

	In-House Led	Consultant Led	Total
Initial Cost Savings	0	$234,114,000	$234,114,000
Initial Cost Increases	0	$52,117,000	$52,117,000
No. Recommendations	0	63	63
Average Scope Performance Improvement (addition to Accepted)	0	7	7
Average Value Improvement (Scope Improvement/ Project Costs)	0	17	17
Acceptance Rate	0	43	43

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17. Life-cycle cost (cost avoidance) savings from VE studies.

Proposed Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$0	$322,641,000	$322,641,000
Subsequent Costs(Savings – Increases)	$0	$18,566,000	$18,566,000
Highway User (Savings – Increases)		$51,435,000	$51,435,000
Total (Net Present Value) LCC Savings (Savings- Increases)	$0	$392,642,985	$392,642,985

* See Item 4 (Sum of Positive and Negative Initial Cost Savings)

Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$0	$157,679,860	$157,679,860
Subsequent Costs(Savings – Increases)	$0	$7,880,000	$7,880,000
Highway User (Savings – Increases)		$408,000	$408,000
Total (NPV) LCC Savings (Savings- Increases	$0	$165,967,860	$165,967,860

* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

Conditionally Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *)	$0	$2,500,000	$2,500,000
Subsequent Costs(Savings – Increases)	$0	0	0
Highway User (Savings – Increases)	$0	$40,000,000	$40,000,000
Total (NPV) LCC Savings (Savings- Increases	$0	$42,500,000	$42,500,000

* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

18. Life-cycle cost (cost avoidance) savings from VE studies.

Proposed Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$0	$304,236,500	$304,236,500
Subsequent Costs(Savings – Increases)	$0	$13,851,008	$13,851,008
Highway User (Savings – Increases)	$0	$90,530,000	$90,530,000
Total (Net Present Value) LCC Savings (Savings- Increases)	$0	$408,617,508	$408,617,508

* See Item 4 (Sum of Positive and Negative Initial Cost Savings)

Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *	$0	$54,426,000	$54,426,000
Subsequent Costs(Savings – Increases)	$0	$0	$0
Highway User (Savings – Increases)	$0	$0	$0
Total (NPV) LCC Savings (Savings- Increases)	$0	$54,426,000	$54,426,000

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* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

Conditionally Accepted Recommendations

	In-House Led	Consultant Led	Total
Initial Costs(Savings-Increases) *)	$0	$118,997,000	$118,997,000
Subsequent Costs(Savings – Increases)	$0	$13,851,008	$13,851,008
Highway User (Savings – Increases)	$0	$0	$0
Total (NPV) LCC Savings (Savings- Increases	$0	$195,848,008	$195,848,008

* See Item 5 (Sum of Positive and Negative Initial Cost Savings)

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